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ABSTRACT

The Information Retrieval Center of the Northern Colorado Educational Board of Cooperative Services (NCEBOCS) offers computer-and manually-produced information products to educators within a regional network. The Center searches the automated Educational Resources Information Center (ERIC) data base to provide three products: Catalog of Computerized Searches (CAT), Current Awareness Profiles (CAP), and Searches in Depth (SID). Manual searches of current educational literature comprise the Packets of Educational Topics (PET). This document describes the Center, its services and products, and is a report of activities during Fiscal Years 1970-1971. Growth statistics, public relations information (including newsletters), and monthly reports are included. (A related document is LI 004 137.) (SJ)

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ED 072784

FINAL REPORT

FY - 1970-71

Information Retrieval Center of the

NORTHERN COLORADO EDUCATIONAL BOARD OF COOPERATIVE SERVICES

Dr. Walter G. Turner

Executive Director

Project Grant Number

OEG-0-70-4304

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
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June 21, 1971

LI 004 136

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ERIC User Note:

The Northern Colorado Educational Board of Cooperative Services (NCEBOCS) is now located at 830 South Lincoln, Longmont, Colorado 80501

(3.73)

PART I

O V E R V I E W

OVERVIEW

I. On April 9, 1970, the Northern Colorado Educational Board of Cooperative Services presented a proposal to the U.S. Office of Education for the purposes of developing a Regional Automated Information Retrieval Center. The regional concept developed from an ESEA Title III project within Colorado designed to process information from an automated data base containing the ERIC research and resource abstracts (RIE - Research In Education) and manually researched information provided by project Reference Librarians.

The Information Retrieval Center currently provides a communication link between teachers, teachers' aides, librarians, administrators, parents study groups on one hand and the newest and latest research and resource materials in the field of education on the other hand. Based upon requests for information from requestors contacting the Center, ERIC abstracts in the form of printouts from the computer and other materials are mailed to the individuals requesting information. Also, based on the services of the Information Retrieval Center, the proposal to the U.S. Office of Education presented a plan to expand the scope of those services, present training programs (through workshops) and to include the State Departments of Education in Utah, Wyoming, South Dakota, Washington, Oregon and Colorado in a regional information processing network.

The fact that the objectives of this proposal have been extremely

successful can be measured through:

1. The findings of the independent Evaluation conducted by Dr. Charles Neidt, Academic Vice President, Colorado State University, Fort Collins, Colorado (Separate document -- LI 004137)
2. The tremendous growth in the number of requests processed per month during the year period of the grant. (See enclosed monthly reports and growth chart).
3. The contractual agreements being made between the Northern Colorado Educational Board of Cooperative Services and each of the States (Wyoming, Utah, South Dakota, Oregon and Washington) included in the regional network, and their willingness to continue the network for FY-1971-72.

It is interesting to note that during the first year (FY-70-71) of this grant, a major and very significant change took place in the basic operation of the Information Retrieval Center. It became apparent by January of 1971 that the rate of growth in requests processed per month was rapidly overtaking the capability of the staff to process the requested information. It also became obvious that the approximately 400 individually processed searches being handled by the Center presented a problem in the turn-around time for information returned to requestors. As a result the Center was closed during the last

two weeks of January, 1971 in order to completely reorganize the flow of processing request, handling of information and types of services available from the Center. Three new products and services are now available from the Retrieval Center of the Board of Cooperative Services in order to supplement the individualized searches (SID) currently offered by the Center. These products include:

1. PET - Packets of Educational Topics - These 61 packages of information cover popular topic areas in the field of education. The pre-processed packages are based on requests of a high demand nature as identified by current users. Packaged information includes manually searched materials as well as computer abstracts and the product is updated on a daily basis. The basic objective of this package is to provide immediate feedback to requestors with requests processed and mailed the same day.
2. CAT - Catalog of Computerized Searches - The objective of this package is to include those areas of information frequently requested by users. The catalog, as distributed by the Center, contains an indexing system and annotations describing the individual topic areas for each of the searches (to be received) if a requestor selects any particular entry. Catalog entries are based on previously requested and research (specific) areas of interest.

These requests are computer processed and mailed within one week after receiving the request.

3. CAP - Current Awareness Profiles - The objective of these 31 topics is to provide Center requestors with a service permitting an automatic quarterly update of the latest information in the data base on selected subjects. The request logic has been pre-determined by the Center staff thereby increasing the processing and turn-around time to requestors. In order to receive the following quarterly update, it is necessary for the requestor to return a postcard indicating his desire to continue to receive the CAP information.
4. SID - Searches in Depth - The individualized information search which the Center will continue to offer as requested by Colorado educators, is the basic product of the Center. This search, which requires a greater turn-around time than the other three products, will be implemented for those searches which cannot be filled through the other new information products. A two-to three week turn-around time is required for these searches because of the comprehensive nature of the information reviewed and provided for this product.

Therefore, a greater selection of educational information products are now available from the Center (as described) which can be presented to requestors, throughout the Regional Network,

in a quicker turn-around time. The success of these new products can be measured by the growth statistics indicated on the monthly reports which catagorize each product by request. The tremendous growth of the information retrieval program during FY-70-71 is a result of expansion within the Board of Cooperative Services area and also is reflected by the increase in requests from the Six State Regional Network.

PART II

GROWTH STATISTICS

GROWTH STATISTICS

II. Participants from the Six States in the Regional Network and Colorado School Districts in the Board of Cooperative Services Area studied the capabilities and limitations of the Information Retrieval Network through the Summer 1970 Workshop at Colorado State University. The Workshop participants were required to turn in a plan for the organization of information within their own State or School District location. As can be seen by the following usage statistics, some states have been much quicker to implement information networks and to utilize the retrieval products than others. The services of the Center are being utilized more and more extensively throughout the Six State Network each month since July 1970, as indicated by the following breakdown:

A. Requests from Regional Information Retrieval Networks:

Wyoming	216
Utah	715
Oregon	403
Washington	571
South Dakota	317
Colorado	2313
Nevada	39
Idaho	9
Montana	1
Other	64
TOTAL AS OF MAY,1971	4648

B. Requests for Automated Information Retrieval based on the ERIC Data Base:

A.	Educational practitioners (includes teachers and librarians K-12	1394
B.	Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	1748
C.	Research and Development Specialists	102
D.	Information Specialista and Dissemination Specialists	460
E.	State Department Officials	492
F.	Others (includes college and graduate students, college professors, USOE officials)	452
	TOTAL AS OF MAY,1971	4648

C. Requests for new products (PET, CAP, CAT and SID). Not reflected in total

A.	Packets of Educational Topics (PET)	754
B.	Current Awareness Profiles (CAP)	408
C.	Catalog of Computerized Searches (CAT)	788
D.	Individualized Searches (Search In-Depth) (SID) (SID Totals Since July, 1970)	2698
	TOTAL AS OF MAY,1971	4648

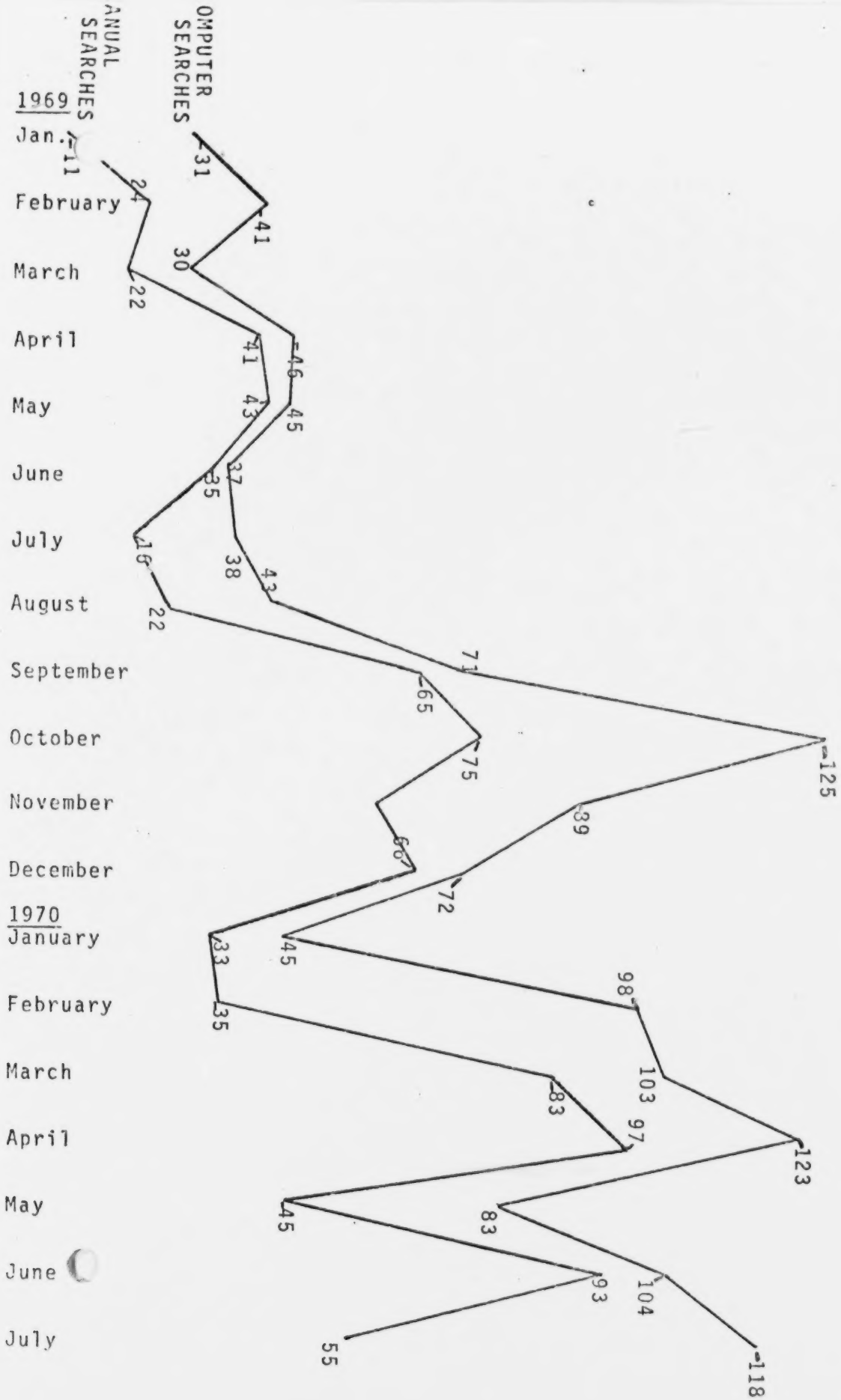
D. YEARLY USER REQUESTS

USER'S REQUESTS - 1969

MONTH	MANUAL	AUTOMATED
January	11	
February	24	31
March	22	30
April	41	46
May	43	45
June	35	37
July	16	38
August	22	43
September	65	71
October	75	125
November	59	89
December	66	72
	479	668

USER'S REQUESTS - 1970

January	33	45
February	35	98
March	85	103
April	97	83
May	45	
June	93	104
July	55	118
August	69	98
September	66	322
October	113	372
November	84	388
December	102	274
	877	2005 (11 Months)


ANUAL SEARCHES
OMPUTER SEARCHES
1969
Jan.
February
March
April
May
June
July
August
September
October
November
December
1970
January
February
March
April
May
June
July
11
24
22
41
46
45
35
16
22
65
125
39
72
45
98
103
123
45
93
55
31
41
30
41
43
37
38
43
71
75
60
33
35
83
97
83
104
118

COMPUTER SEARCHES
MANUAL SEARCHES
1970
July
August
September
October
November
December
1971
January
February
March
April
(55)
(118)
(69)
(98)
(66)
(322)
(113)
(372)
(84)
(388)
(102)
(274)
(33)
(202)
(71)
(521)
(83)
(677)
(63)
(961)

USER'S REQUESTS - 1971

MONTH	MANUAL	AUTOMATED
January	33	202
February	71	521
March	83	677
April	63	961
May	88	796
	338	3157
TOTAL	1694	5830

As can be seen by the dramatic growth tables presented on the following pages, the utilization of educational research and resource information is growing at a phenomenal rate. The impact of providing research and resource information on a regional basis (to the 5 states outside of Colorado) accounts for the dramatic upturn starting in August, 1970. The extreme decline starting in January, 1971 represents the two week period of closure during which time the 3 new information products (PET, CAP & CAT) were designed and implemented.

The following chart represents the types of representative requests being made by administrators, consultants, supervisors, teachers and graduate students.

TYPES OF REQUESTS

ADMINISTRATORS
(Superintendents, Assistants, Principals)

Administrators make the following types of requests:

- Assessment of Educational Needs
- Boards of Education (working with)
- Controversial Issues in Policy Making
- Differentiated Staffing
- Educational Finance
- Program Budgeting
- Use of Teacher Aides
- Use of Advisory Committees (Lay Committees)
- Bussing
- Open Space Concept of Organization
- Current Status of School Integration
- Bond Issue Information

CONSULTANTS-SUPERVISORS

Consultants & Supervisors make the following types of requests:

- Remediation Methods
- Ability Testing
- The Counselor's Role
- Health and Safety
- Information on Reading Consultants
- Teacher Evaluation
- Correctional Education
- Bibliotherapy
- Psychological Services (Existing Types)
- Special Education Programs
- Summer Programs

TYPES OF REQUESTS (Cont)

TEACHERS

Teachers make the following types of requests:

- New Concepts in Curriculum & Course Development
- Classroom Management Techniques
- Human Relations Unit
- Programmed Instruction
- Self Directed Groups
- Reading - Elementary Instruction
- Science Instruction
- Teaching of Values
- Biology Units
- Air Pollution
- English Instruction - New Programs
- Free Choice Units for Second.School Students
- Peer Teaching
- Team Teaching
- Non-Graded Schools
- Ungraded Schools
- Support Information for all Curriculum Areas

GRADUATE STUDENTS

Graduate Students make the following types of requests:

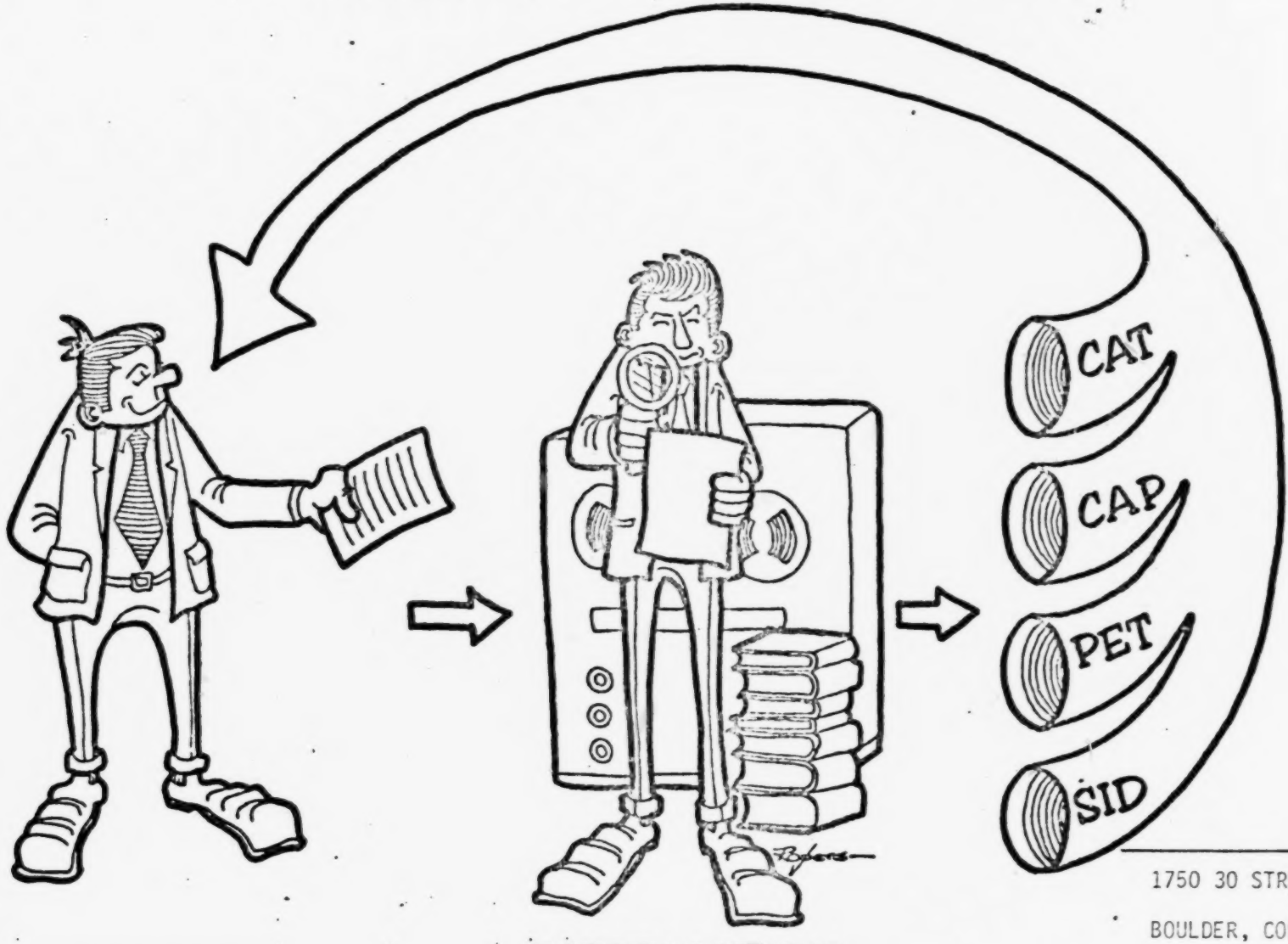
- Research in Computer Assisted Counseling
- Hyperactive Children Research
- Current Programs in Geriatrics
- Research In Psychomotor Development
- Undergraduate Curriculum Programs
- Sensitivity Training & Teacher Groups
- Student Activism
- Television Effects on Children

PART III

PUBLIC RELATIONS INFORMATION

Northern Colorado Educational BOCS

INFORMATION RETRIEVAL CENTER



REQUESTOR

INFORMATION
RETRIEVAL STAFF

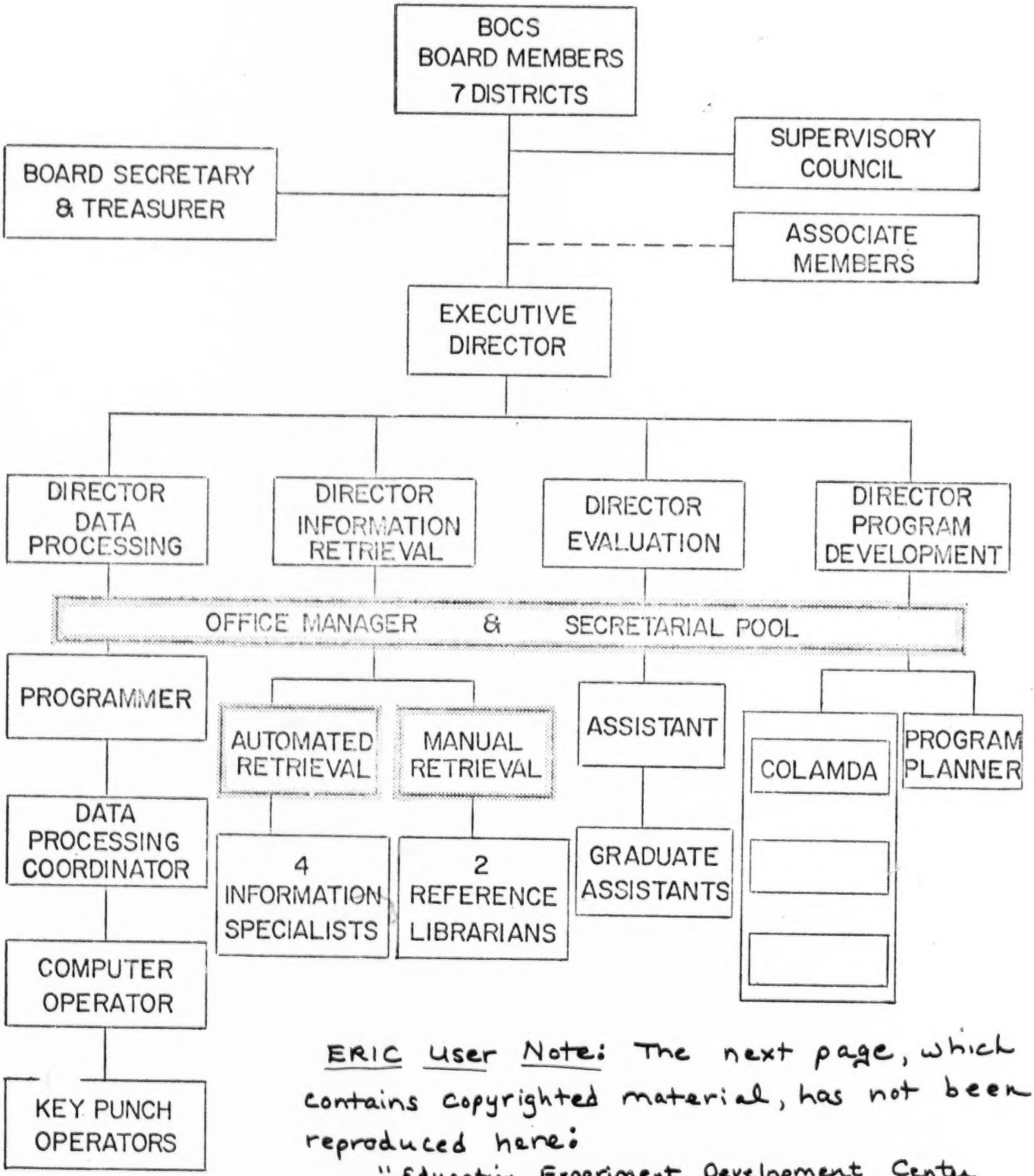
1750 30 STREET, SUITE 48
BOULDER, COLORADO 80301
PHONE: (303) 444-4987

A B S T R A C T

The Information Retrieval Center of the Northern Colorado Educational Board of Cooperative Services is funded by the U.S. Office of Education under the Cooperative Research Act and the National Center for Educational Communication (Educational Resources Information Center), and by ESEA Title III through the Colorado Department of Education. This Board of Cooperative Services exists to provide a variety of services to the educational community it serves in the areas of: Program Development, Program Evaluation, Data Processing, Information Retrieval, and Multi-Media Program. The seven Colorado school districts served include: Boulder Valley RE-2J (Boulder Public), Boulder RE-1J (Longmont), Adams 50 (Westminster), Adams 12 (Thornton-Northglenn), Larimer R-1 (Ft. Collins), Larimer R-2J (Loveland), and Larimer R-3 (Estes Park). In addition to the seven school districts, three universities operate as associate members to this Board of Cooperative Services. They are Colorado State University in Fort Collins, the University of Colorado in Boulder, and the University of Northern Colorado in Greeley.

The Information Retrieval Center of this Board of Cooperative Services serves a regional network of educators, including elementary and secondary teachers and paraprofessionals; administrators, consultants, and project directors; parent study groups; school board members; state department officials; graduate students and professors; and representatives of the U.S. Office of Education. Six states (through Departments of Education) currently participate in a growing network of information retrieval through the Information Retrieval Center. These states include: Colorado, South Dakota, Utah, Washington, Wyoming, and Oregon. Additional requestors are served on an individual basis.

The Boulder Information Retrieval Center offers its educational requestors both automated and manually searched information products. A staff of information specialists, reference librarians, data processing and clerical personnel provide four information products to meet requestors' needs. These products include PET (PACKETS OF EDUCATIONAL TOPICS), CAT (CATALOG OF COMPUTERIZED SUBJECT SEARCHES), CAP (CURRENT AWARENESS PROFILES), and SID (INDIVIDUALIZED SEARCHES IN DEPTH). See the attached "Information Retrieval Terminology" for detailed descriptions of these products, designed to serve a widespread educational community with diverse information needs. Microfiche' supplying the entire document of abstracted information included within these products are available on loan from the Center, and/or may be duplicated for a nominal fee on request.



ERIC User Note: The next page, which contains copyrighted material, has not been reproduced here:

"Education Experiment, Development Center in Operation." Boulder Daily Camera, Back-to-School Edition, August 11, 1970. p. 15.

INFORMATION RETRIEVAL TERMINOLOGY

ERIC:

Education Resources Information Center, a nationwide system for collecting, abstracting, indexing, storing and disseminating papers, reports, etc., in the field of education.

CENTRAL ERIC:

The main coordinating office of ERIC, located in Washington, D.C., at the U.S. Office of Education.

CLEARINGHOUSE:

Any of 19 offices handling research informatior pertaining to a given facet of education.

LEASCO-ERIC TAPES:

The contractor responsible for merging the document resources at all clearinghouses and for preparing the monthly magnetic tape from which Research In Education is printed.

RIE:

Research In Education, an abstracting journal of ERIC documents, issued monthly.

CIJE:

Current Index to Journals in Education - A new monthly publication with indexes and citations to articles appearing in 500+ education or education-related journals.

SPECIAL COLLECTIONS:

From time to time, ERIC produces a special collection of documents. An index-resume' volume(s) is prepared and documents cited are available, singly or as a complete set, in microfiche' or hardcopy.

DOCUMENT:

Research papers, studies, dissertations, curriculum studies, etc., that have been put into the ERIC system.

ABSTRACT:

The substantial summary citing each document in RIE, and appearing on the first page of each document.

REPORT NUMBER:

That number assigned to each document abstracted. This ED number is used for ordering ERIC documents.

DESCRIPTORS:

Terms used to index documents and to retrieve them; for example, the subject terms are descriptors.

RESUME':

Contains not only the abstract, but also cataloging information about the document - author, title, institution, etc. - and the descriptors used for indexing the document citation in RIE.

THESAURUS:

A collection of descriptors published by Central ERIC; to be used as an authority when storing and searching for documents; arranged alphabetically by subject.

HARDCOPY:

Documents printed by a contracted firm on paper large enough for easy reading, collated with a cover, 70% type size.

MICROFICHE':

Microfilm cards measuring 4" X 6", containing up to sixty pages of information per microfiche', available from ERIC Document Reproduction Service; LEASCO Information Products; 4827 Rugby Avenue; Bethesda, Maryland 20014.

MICROFICHE' READER:

A machine for reading each page of a microfiche'.

MICROFICHE' READER-PRINTER:

A reader that also can print a photocopy of each page of the document. (Fiche' to hardcopy).

MICROFICHE'-DUPLICATOR:

Reproduces Microfiche' (fiche' to fiche').

REQUESTOR:

An educator who requests information about an educational topic or idea from the Information Retrieval Center. Requestors may range from classroom teachers or paraprofessionals to administrators, higher education professors or graduate students.

INFORMATION SPECIALIST:

An Information Retrieval staff member who interprets requests received by the Center, and who writes "logics" (search strategies) to retrieve information from the automated data base, relevant to those requests.

REFERENCE LIBRARIAN:

An Information Retrieval staff member who interprets requests with the information specialists prior to conducting a manual search for periodical articles relevant to a specific request. Staff reference librarians use university, local, and inter-library loan facilities and services to fulfill requests.

PROFILE:

A collection of ERIC abstracts searched relevant to a particular request, and processed for the requestor as an information product.

CURRENT INTEREST:

That portion of the Center's automated ERIC data base of the Information Retrieval Center, containing the most recent 6 months of information, appearing in abstracted form.

HISTORY:

That portion of the Center's automated ERIC data base containing RIE abstracts appearing prior to the most current 6 months of information.

CAT-CATALOG OF COMPUTERIZED SUBJECT SEARCHES:

A pre-processed search of the automated data base, containing abstracts from RIE. CAT search logics are based on previous individual requests and searches. Turn-around time for CAT's is within one week.

PET-PACKETS OF EDUCATION TOPICS:

A packet of information representing sections of a broad topic area frequently requested by educators. A packet contains both computer-printed abstracts and manually searched articles relevant to a designated topic. Turn-around time is within one week.

CAP-CURRENT AWARENESS PROFILE:

An information profile containing RIE abstracts, designed to give a broad, but not necessarily comprehensive coverage to "hot" educational topics. CAP updates may be ordered on a quarterly basis. Turn-around time for a CAP is within one week.

SID-SEARCH IN DEPTH:

An individualized search of the automated ERIC data base, which may also include a manual search conducted by staff reference librarians. This in-depth search may require from 2 to 3 weeks' turn-around time.

RETRIEVAL NUMBER:

A user number, assigned solely to each individual SID request. This retrieval number appears on the upper right hand corner of every abstract contained in that particular profile requestd.

TURN-AROUND TIME:

The amount of time measured by this Center in days (excluding weekends) which occurs between the date a request is received by the Center and the date it is mailed from the Center to the requestor.

DOCUMENT REQUEST FORM:

That form accompanying each information profile from which the requestor may order full documents in microfiche' of abstracts appearing in that information profile.

ERIC CLEARINGHOUSE NETWORK

TC Document Reproduction Service
Leasco Information Products, Inc.
4827 Rugby Avenue
Bethesda, Maryland 20014

ERIC CENTRAL
National Center for Educational Communication
U.S.Office of Education
400 Maryland Avenue,S.W.
Washington, D.C. 20202

CCM/CIJE
CCM Information Corp.
909 Third Avenue
New York, New York 10022

AL APPLIED LINGUISTICS
Center for Applied Linguistics
Washington, D.C. 20036

CG COUNSELING AND PERSONNEL SERVICES
University of Michigan
Ann Arbor, Michigan 48104

EA EDUCATIONAL MANAGEMENT
University of Oregon
Eugene, Oregon 97403

EC EXCEPTIONAL CHILDREN
The Council for Exceptional Children
Washington, D.C. 20036

EM EDUCATIONAL MEDIA AND TECHNOLOGY
Stanford University
Stanford, California 94305

FL TEACHING OF FOREIGN LANGUAGES
Modern Language Assn. of America
New York, New York 10011

HE HIGHER EDUCATION
George Washington University
Washington, D.C. 20006

JC JUNIOR COLLEGES
University of Calif. at Los Angeles
Los Angeles, California 90024

LI LIBRARY AND INFORMATION SCIENCES
American Society for Information Science
1140 Connecticut Avenue N.W.,Suite 804
Washington, D.C. 20036

PS EARLY CHILDHOOD EDUCATION
University of Illinois
Urbana, Illinois 61801

RE READING
Indiana University
Bloomington, Indiana 47401

RC RUAL EDUCATION AND SMALL SCHOOLS
New Mexico State University
Las Cruces, New Mexico 88001

SE SCIENCE EDUCATION
The Ohio State University
Columbus, Ohio 43221

SO ERIC CLEARINGHOUSE FOR SOCIAL SCIENCE EDUCATION
970 Aurora
Boulder, Colorado 80302

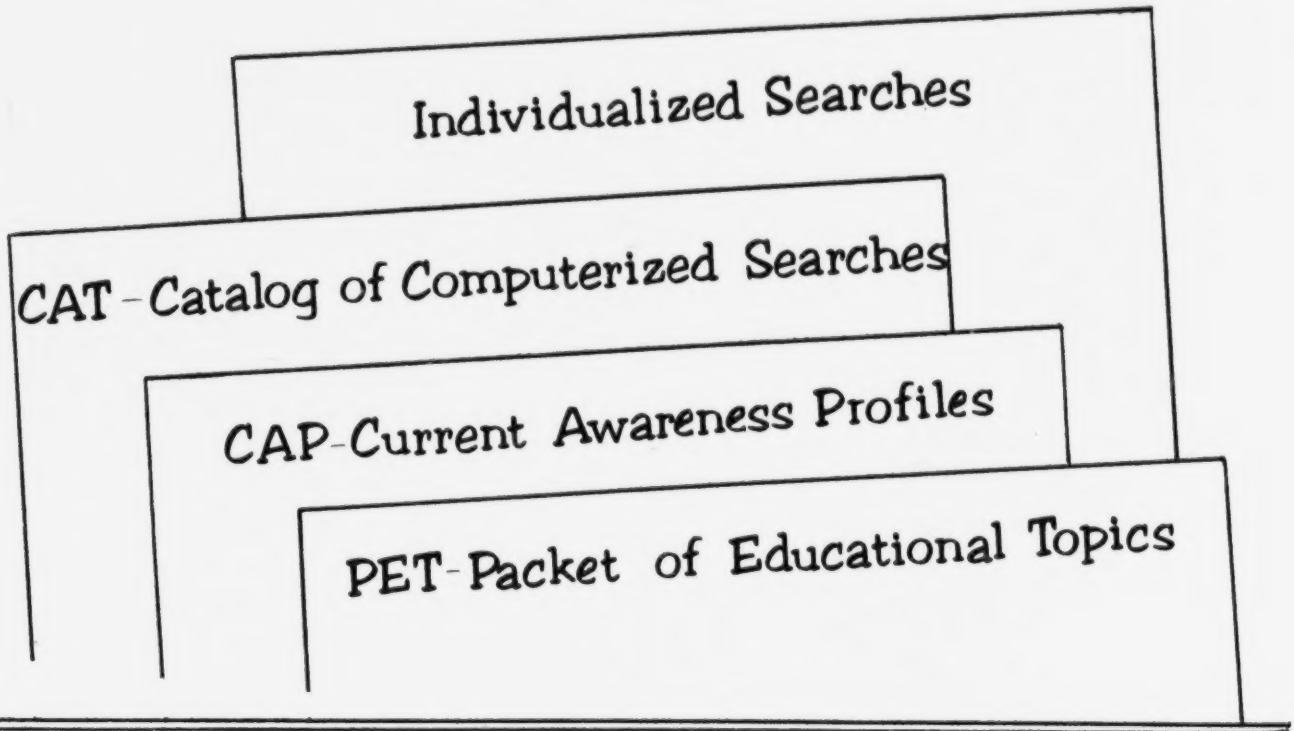
SP TEACHER EDUCATION
American Association of Colleges for Teacher Education
Washington, D.C. 20005

TE TEACHING OF ENGLISH
National Council of Teachers of English
Champaign, Illinois 61820

TM TESTS, MEASUREMENT, AND EVALUATION
Educational Testing Service
Princeton, New Jersey 08540

UD DISADVANTAGED
Teachers College
Columbia University
New York, New York 10037

VT VOCATIONAL AND TECHNICAL EDUCATION
The Ohio State University
Columbus, Ohio 43210


Individualized Searches
CAT - Catalog of Computerized Searches
CAP - Current Awareness Profiles
PET - Packet of Educational Topics

NEWS from the Northern Colorado Educational Board of Cooperative Services

VOLUME 1 | BOULDER, COLORADO | FEBRUARY/MARCH 1971 | NUMBER 3

Information Retrieval Systems Expand

FOUR-PRODUCT APPROACH OFFERS USERS FASTER TURNAROUND, ALTERNATIVE SERVICES

by Linda McCrea

"PET, CAP, CAT"... LOOKS LIKE JUST MORE ACRONYMS, BUT ACTUALLY MEANS MORE SERVICE TO YOU, OUR USERS. THE INFORMATION RETRIEVAL CENTER OF THE NORTHERN COLORADO EDUCATIONAL BOCS HAS JUST EMERGED FROM A TWO-WEEK SHUTDOWN DESIGNED TO RENOVATE AND INNOVATE MORE EFFICIENT AND MORE EFFECTIVE SERVICE TO ITS FIELD OF EDUCATIONAL REQUESTORS.

As the statistics on page 4 indicate, during the months of November and December alone, the retrieval staff processed more than 660 individualized requests. An average production rate for Information Specialists, based on statistics from retrieval services in science, medicine, and industry, is four per person per day. On this basis, at top capacity, our existing retrieval staff should be able to process 504 requests in that two-month period. The need for a new system to maintain service and decrease turnaround time for the requestor witnout sacrificing quality was obvious! (Continued on page 5)

'PET, CAT, CAP'... THREE NEW EDUCATIONAL INFORMATION

Notes From Chairwomen:

ROMIE LUNDQUIST

An educator concerned with what's going on in education today may read through the listing of PACKETS OF EDUCATIONAL TOPICS (PET). He may find a broad educational topic in which he is interested, and wish to receive a packet(s) available under that topic. Broad educational topics are divided into packets of information for the user's selection.

Packet titles represent selected materials included within broad topic areas and provide general, survey-type background information pertaining to those topics. PET consists of periodical articles and ERIC (the U.S. Office of Education's Educational Resources Information Center) computer-printed abstracts. The periodical articles and the computer-printed abstracts are both manually searched and evaluated. The contents of each packet are evaluated constantly by updating the packets with new materials as they appear in current periodicals and from the computer data base. Additions (and deletions) are made as materials are located which provide a better, more current, and a more inclusive survey of the broad educational topic.

Additional PACKETS OF EDUCATIONAL TOPICS are presently being developed. Users are encouraged to share their suggestions for broad educational topics and/or packets to be considered for future development by the staff.

Once a requestor has received and read packets dealing with topics in which he has an interest, he may decide he needs additional or more detailed information.
(Continued on page 3, Col.1)

ELISE ALBRIGHT

CAT, a CATALOG OF COMPUTERIZED SUBJECT SEARCHES IN EDUCATION, contains profiles of information which have been produced in response to individual requests by the Information Retrieval Center users. These searches contain abstracts published in RIE, Research in Education, a publication of the U.S. Office of Education. The abstracts represent selected theses, government reports, textbooks, periodical articles, and research areas in education compiled by specialized subject area clearinhouses throughout the United States. The abstracts funnel into ERIC Central where they are combined and distributed to RIE subscribers, including this Information Retrieval Center. Full documents of these abstracts are available upon request to users from the Center's microfiche collection (see page 4), or by writing to publishers of hard copy products when applicable.

CATalog entries are directed toward requestors who seek information on a specific area of information, as defined by previous requests. Information retrieved from the computerized search is representative of the general state of information currently being produced by government, state, and local agencies, and included in RIE These entries may appeal to a variety of users, ranging from public school administrators, consultants, and teachers to graduate students, university professors, and educational agency personnel.
(Continued on page 3, col. 2)

MARY BROWN

CAP, the CURRENT AWARENESS PROFILE, is an information product newly designed by the Information Retrieval Center to give a broad, but not necessarily comprehensive coverage to approximately 30 educational subjects. It is a quarterly review of information obtained from the most recent Research in Education tapes produced by the U.S. Office of Education.

A CAP contains from twenty to sixty abstracts in the familiar Information Retrieval Center format. A cover page, user's guide, and document request form are included with all profiles. Most of the information in the CAP will be relevant to a major topic area. The user must make the judgment on the value and relevance of a particular item according to his needs and interests.

The usefulness of CAP to the individual user is twofold. He may wish to keep up to date on new developments in a particular field of educational interest. He may also wish to obtain a broad background of information, using CAP as an introduction to a particular area of knowledge.

It is hoped that the feedback from requestors will enable the staff to add new areas of interest to meet demands of the expanding field of education. Current Awareness (CAP) must remain flexible enough to include the ideas and suggestions of users, as the product grows in use.

CAP complements the other newly designed information products to facilitate ser ce to requestors. These prot..es may enable users to identify areas of interest proceding more specific requests from
(Continued on page 3, Col. 3)

RETRIEVAL PRODUCTS DESIGNED TO SERVE YOU!

(PET- Con'd. from p. 2, Col.1) For more specific material on a subject he wishes to pursue, he may request from the 'CATALOG OF COMPUTERIZED SUBJECT SEARCHES IN EDUCATION (CAT). A current overview of information relevant to a broad area of interest is available through the CURRENT AWARENESS PROFILE (CAP) SERVICE, on a continuing, quarterly basis as requested by the user.

The Student's Future With Information Systems

"Educational Information Retrieval needs to be available to students as well as to educators." So reacts Romie Lundquist, reference librarian on the staff of the BOCS Information Retrieval staff, when asked trends of Educational Information Retrieval in the future. She continues, "Immediate access to appropriate information is feasible with todays technological developments. Today's student has a great diversity of informational needs due to the great variety of curriculum offerings in our educational systems. She states, "The day will come when ANY student in ANY school in ANY part of the country can utilize technological devices immediately available to him to retrieve an answer to a question whether that question be of a factual, a theoretical, or a philosophical nature."

His 'answer' will be presented to him quickly; it may be presented to him in print form, on audio-tape, (Continued from Col. 1) on a filmstrip, by microfiche and reader, or through a combination of materials. Or it may be presented to him in a form of which we are not yet cognizant."

Romie cites "accessibility and functionalism, speed, and correctness or reliability" as achievements in information retrieval for students of today's expanding world.

(CAT- Con'd. from p. 2, Col. 2) Entries in the CATalog are grouped and annotated under major subject categories with an index following the text to serve not only as a cross reference between major subject categories, but also to aid in finding specific topics.

The CATalog of computerized searches is designed to compiement other Information Retrieval products. A user who has been introduced to the system through an overview of a broader area, such as "Differentiated Staffing", supplied him in the combined manual and computerized, evaluated PACKET OF EDUCATIONAL TOPICS (PET), may submit a request for a CATalog COMPUTERIZED SUBJECT SEARCH on one aspect of Differentiated Staffing, such as the "Use of Paraprofessionals at the Junior High Level." After receiving both of these products, he may wish to order a CURRENT AWARENESS PROFILE (CAP), to keep him informed of the latest trends in the general area of "Personnel." He may renew this product request quarterly. Individualized searches remain as an avenue for requests which cannot be satisfied through one of the other designed product areas.

(CAP- Con'd. from p. 2, Col. 3) other product areas, or may allow users to survey a particular field, in order to skim new ideas and developments in education on a continuing basis.

"Readers" Available

The Information Retrieval Center has the entire ERIC microfiche collection available to its users, complementing RIE abstracts whose documents are available in microfiche form. Sets of fiche may be circulated among Colorado users from this center, on request. Duplicate copies of these fiche are also available to requestors at the minimal price of $.25 for the first sheet, and $.10 for each additional sheet. One sheet of microfiche may contain up to 60 pages of written material.

Two portable microfiche readers are available to Boulder Valley school personnel through the Information Retrieval Center, in addition to one reader which may be used at the Center.

At this time a portable model microfiche reader may be ordered at a specially reduced price. Interested requestors may contact Mr. McCleary at the Information Retrieval Center about purchasing this model.

This bi-monthly newsletter is published by the Northern Colorado Educational Board of Cooperative Services. For more information, contact Exectutive Director Dr. Walter Turner, or Public Relations and Publicity, Linda McCrea.
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1750 30th Street, Suite 48
Boulder, Colorado 80301
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IRC DIRECTOR FORESEES INFORMATION NETWORKS

"In this age of people's demands for 'Instant Answers,' Educational Information Retrieval must provide usability and availability of products on an efficient, as well as an effective basis." Describing the trends of the information explosion today, Information Retrieval Center Director Bill McCleary talked about the necessity to organize the 'mountains' of information available today into usable form for educators requesting that material. One such organizational tool in growing use today, cited by the Director, is the variety of computerized systems being designed for research and reference use. Mentioning the approximately 40,000 entries in our current ERIC Research in Education data base, McCleary projected this figure to over 100,000 entries in the near future, with the addition of Current Index to Journals in Education (CIJE) and Current Projects Information (CPI) tapes.

Presently serving over seven states in Educational Information Retrieval, the Boulder Educational Information Retrieval Center of the Northern Colorado Educational BOCS "demonstrates the workability of a successfully operational center for Information Retrieval," claims Director McCleary. At this time, South Dakota, one state within the region, is served directly by the Center through an on-line, high-speed printer terminal, providing almost immediate service to requestors. Turnaround time on requests for terminal users is one-third that of normal request-processing time.

Another such terminal is projected to be in use at the University of Northern Colorado, an Associate Member to the Northern Colo. BOCS, by the end of February, 1971. This terminal will be used to implement an innovative program serving undergraduate teacher trainees in the use of multimedia and research in an effort to further coordinate the aims of higher education with elementary and secondary levels. This research is sponsored by a U.S. Office of Education grant recently submitted. Director McCleary foresees the possibility of such on-line terminals in every state served by a regional center such as this one in Boulder, serving as a disseminating network for the various states.

IRC STATISTICS TELL STORY!

Since July, 1970, when the Northern Colorado Educational BOCS initiated its tri-services of Program Development, Program Evaluation, and Information Retrieval to educators, a total of 1,533 requests have been processed by the Information Retrieval staff. The following breakdown indicates trends in information-seeking and disseminating among regional users. Figures represent requests received and processed during the months of November and December, 1970, compared to a running total since July, 1970. States using these services on an individual paying basis outside of the existing network are indicated under the "other" category.

REQUESTS PROCESSED BY STATE:

STATE	Nov.-Dec. '70	since July, 1970
WYOMING	25	32
UTAH	73	221
OREGON	42	65
WASHINGTON	183	357
SOUTH DAKOTA	66	92
COLORADO	251	690
OTHER	22	66
TOTAL	662	1533
TOTAL MANUAL SEARCHES	186	489

REQUESTS (PROCESSED) INDICATED BY USER CATEGORIES:

USER CATEGORY	Nov.-Dec. '70	since July, 1970
A. EDUCATIONAL PRACTITIONERS (includes classroom teachers and librarians K-12)	194	464
B. EDUCATIONAL DECISION MAKERS (includes administrators, project directors, consultants, department chairmen	256	628
C. RESEARCH AND DEVELOPMENT SPECIALISTS	14	46
D. INFORMATION AND DISSEMINATION SPECIALISTS	37	87
E. STATE DEPARTMENT OFFICIALS	73	168
F. OTHERS (including graduate students, higher education, and USOE Officials)	88	190
TOTAL	662	1533

FOUR-PRODUCT APPROACH . . .

(Continued from page 1)

Previous to the shop shutdown, the Information Retrieval staff met several times with BOCS directors to determine the most feasible products design which would satisfy user demands and be workable for the staff to produce. The resulting two weeks were used to design and implement those products we are now offering you.

Products design was a cooperative effort of the entire Information Retrieval staff. Each product committee enjoyed the advantage of input from different departments of the Information Retrieval staff, in a cooperative effort to produce meaningful material. Representatives from the information specialists, reference librarians, data processors, and clerical staff pooled knowledge and talents in creating these products. Additional invaluable input was provided through the cumulative files of former request logics and profiles sent out to users throughout the existence of the Information Retrieval Center. These data provided not only raw material, but indications of "hot topics," "popular requests," and "seldom-tapped" areas of information-seeking by our users.

We hope to maintain this channel of user-feedback through "live coverage"--in the form of questionnaires; through reactions to the individual products as you use them and feel a need for additions, deletions, or entire new products and from your valuable comments on the usability and practicality of our forms (such as request forms, evaluation questions, and user response forms) as you become familiar with them through use.

Detailed descriptions of the three new products appear on pages 2 and 3 of this newsletter. Our thinking behind the four products we now offer our users links the four in a variety of approaches, depending on the requestor's current familiarity not only with information retrieval, but with the individual subject he is pursuing at the time.

We suggest that a teacher who has just discovered he will be team-teaching next year may want to tap the PET (PACKETS OF EDUCATIONAL TOPICS) product for an introduction to the field of team teaching. He might request any of three existing packets under that broad area: "Team-Planned Instruction", "Team Teaching--Elementary Level", or "Team Teaching--Secondary Level". After reviewing the packet material he receives, consisting of manually searched and evaluated periodical articles as well as manually evaluated, pertinent abstracts, he may request a more specific search from the CAT (CATALOG OF COMPUTERIZED SUBJECT SEARCHES), such as "Team Teaching vs. Conventional Teaching." In response to this CAT request, he will receive a computer profile of abstracts relevant to the title he ordered, with an indication of that profile's contents from the annotation appearing with the title in the CATalog. This annotation may read: "A comparison of team teaching as opposed to the traditional method of teaching." The administrator who assigned the above teacher to this position may be generally familiar with the area, and want to "keep on top of developments in the field." He may order a corresponding CAP (CURRENT AWARENESS PROFILE) entitled "Teaching Styles," which will give him a broad, but current overview of information relevant to developments in teaching styles. He has the option of renewing this search on an updated, quarterly basis.

Another approach to the CURRENT AWARENESS PROFILE may be to subscribe to a CAP for an introductory overview of the field, before going on to one of the other products. As all three of the above described products are ready-designed, the only delay from the date the requestor orders information to the day he receives it will be for mailing time.

The fourth product is one with which our users are familiar---the INDIVIDUALIZED SEARCH. However, with the addition of the three new products described, and the resultant time allowed for concentrating on individualized searches within a more realistic timeline, users may expect answers to individual questions which cannot be satisfied by one of the above three products. His INDIVIDUALIZED SEARCH may contain computer-printed abstracts, and/or manually searched periodical articles, to be determined for each request by the Information Retrieval staffers fulfilling that request. Of necessity, the time involved in gathering these materials will demand a longer turnaround time for INDIVIDUALIZED SEARCHES, which may range from two weeks to a month, depending on the search.

We appreciate this opportunity of taking time to better serve you, our users, and anticipate your participation in feedback as you use our new product services! We hope you will take time to respond to related questions directed to you, our users, in a later edition of this newsletter.

PAYROLL, PERSONNEL, SCHEDULING,...

AUTOMATION HITS NCEBOCS...AUTO

NEWS from the Northern Colorado Educational Board of Cooperative Services

Volume 1 Boulder, Colorado May/June 1971 Number 4

AUTOMATION IN COLORADO SCHOOL DISTRICTS

In October of 1970, according to statistics released by the Colorado Department of Education, only 30 of Colorado's 181 school districts, or less than 17%, reported any use of automated data processing. 140 school districts, over 77%, indicated no plans for use of automated data processing. Automated data processing in Colorado is currently concentrated in the urban areas, particularly the Metro-Denver area, according to availability of and access to funds, equipment, and technical personnel.

Other school districts incorporating data processing contract for these automated services. Services provided by automated data processing in these school districts to date are mostly concerned with administrative, recordkeeping, and accounting tasks. Instructional uses are found in less than 30% of the 30 school districts using automated data processing. The time required to manually gather information ranging from recordkeeping, to student evaluation, to individualized instruction techniques for each of Colorado's more than 535,000 students enrolled in those 181 districts has rapidly exploded beyond "man-handling" capabilities.

INCREASED DEMANDS ON INFORMATION-PROCESSING

In a rapidly changing and growing field, specialized technological personnel and equipment, currently available in a limited number of school districts throughout Colorado, will be necessary to meet the demands of the information-gathering explosion, and to coordinate efforts of involved school districts to implement, develop, and share existing programs, rather than bear the repeated expense of re-inventing programs to perform similar tasks for each individual school district application. Modern time-sharing capabilities may be used to effectively alleviate the prior necessity of automated data processing facilities physically located near each school district. State financing of regional centers to serve multiple school districts offers a possible alternative to provide financial support throughout the state.

NEW NCEBOCS DATA PROCESSING DIRECTOR

Gene Mooneyham joined the Northern Colorado Educational Board of Cooperative Services as Data Processing Director in Fegruary, 1971. A former Senior Systems Consultant for UNIVAC, Mooneyham aided customers in the design and implementation of various applications including payroll, labor analysis, Critical Path Method Scheduling, accounts receivable, accounts payable, inventory control, tape-oriented information retrieval, communicators to U100, U300 teletype, and DCT 2000 and 1004. He also taught classes in COBOL, RPG and DISC concepts. As a consultant to Denver Public Schools, he assisted in the design and implementation of several of their data processing applications. (Continued on page 2)

NCEBOCS OFFERS EDUCATORS ANOTHER SERVICE

MULTI-MEDIA PROGRAM SHARES SCHOOL, PUBLIC RESOURCES

A pilot, cooperative, Multi-Media Program is operating throughout the Northern Colorado Educational BOCS. Aided by a grant from the Office of Library Services (Colorado State Library), this program is designed to coordinate services among city libraries and public school libraries for the mutual benefit of students and adults of participating communities.

Initial efforts of this program are centered around the distribution of an Audio Tape Exchange Catalog with annotated entries from several of the libraries in this BOCS area. This Catalog is being distributed throughout participating public and school libraries in this area. A central collection of audio tape masters will be housed in this BOCS office, with the master collection continuing to be developed and expanded as tapes are requested and duplicated from cooperating district collections and through the BOCS office. To build and maintain this central collection of tape masters, the Media Advisory Committee has decided that a $1.00 charge per tape duplication will be made for each request.

The Northern Colorado Educational BOCS Media Program, directed by Bill McCleary in cooperation with the participating media and/or library supervisors, will serve in a clearinghouse capacity for existing Multi-Media and/or Instructional Media Centers throughout this BOCS, to facilitate the sharing and growth processes of Multi-Media utilization.

Automation Hits NCEBOCS (continued from Page 1)

In addition, Mooneyham has had extensive experience in systems analysis and programing related to large scale problems employing computer processing, as a group leader in a major effort to develop a Financial Management Information System for the operations of the Ford Foundation. He maintained Agency-level liaison with the U.S. Department of Agriculture Managers, and was a full participant in the development of the Current Research Information System (CRIS) for that Department.

Other responsibilities include design of a classified document control system for an atomic energy support agency, a trouble-shooting assignment to the Student Loan System team for the Department of Health, Education and Welfare, and membership on the professional team responsible for solving equipment interface problems in developmental stages of the Naval Tactical Data System (NTDS). Additional experiences in system design, analysis and programing, primarily in management/financial information systems, document control, command and control, general business applications, and system software areas cover a span of 8 years, prior to his heading the data processing staff of the NCEBOCS.

CURRENT NCEBOCS APPLICATIONS

Currently the Northern Colorado Educational BOCS offers automated data processing services to its educational community from this equipment located at the Boulder Center: a UNIVAC 9300 computer with six tape drives, a 600 line-a-minute printer, a 400 card-a-minute reader, and capabilities of remote communication on four lines simultaneously. A remote on-line terminal is presently in operation in South Dakota from the Boulder Center.

Computer time is available to all seven districts on request, in addition to systems design and program availability options. At this time the following systems are offered throughout this BOCS, operational in various districts: Grade and Attendance Reporting, Personnel, Payroll, Remote Inquiry, Teacher Salary Analysis, Student Scheduling, Personnel Labels, Library System, Student Fortran Programing, Student Management Simulatior Warehouse Inventory, and Enrollment Estimates Systems.

Any or all of the above programs and options for individual modifications are available to NCEBOCS districts on pro-rated, developmental cost break bases. Mooneyham emphasizes "a growing emphasis on the use of a centralized computer system with terminal input/output capabilities to more adequately serve informational data-gathering needs of the educational community."

INFORMATION RETRIEVAL STAFF REACHES RECORD PRODUCTION

Since the development of the four new educational research and resource products offered by the Information Retrieval Center of the NCEBOCS, a record number of profiles have been processed by this Center. In April alone, 961 information profiles were searched, compiled, and sent by the Information Retrieval staff. A total of 3, 859 profiles have been processed by the Center since July, 1970, when the BOCS officially opened its doors. Of that total, 2,570 profiles have been "new products" processed since February.

Statistics for one month's production, that of April, follow in three categories: by product, by requestor/category, and by region.

I. APRIL REQUESTS LISTED BY PRODUCT

Product Category	No. Processed
PET (Packets of Educational Topics)	275
CAT (Catalog of Computerized Subject Searches)	333
CAP (Current Awareness Profiles)	116
SID (Individualized Searches in Depth)	237
TOTAL PRODUCTS PROCESSED	961

II. APRIL REQUESTS FOR AUTOMATED INFORMATION RETRIEVAL LISTED BY REQUESTOR/CATEGORY

Requestor/Category	April Requests	Total since July, 1970
Educational practitioners (includes teachers and librarians K-12)	243	1189
Educational Decision-Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	312	1356
Research and Development Specialists	5	74
Information Specialists and Dissemination Specialists	213	394
State Department Officials	135	458
Others (includes college and graduate students, college professors, USOE officials)	53	388
TOTAL FOR APRIL	961	3859

III. REQUESTS PROCESSED FOR STATES WITHIN INFORMATION RETRIEVAL NETWORK, RANKED BY USE

Name of State	April Requests Rank, Number	Requests s. 7/70 Rank, Number
COLORADO	1 (564)	1 (1976)
WYOMING	2 (108)	6 (177)
[illegible]	3 (99)	3 (506)
OREGON	4 (95)	5 (282)
WASHINGTON	5 (57)	2 (542)
SOUTH DAKOTA	6 (31)	4 (286)
TOTALS	961	3859

NEARLY 4,000 PROFILES PROCESSED SINCE JULY, 1970!

REMINDER TO NCEBOCS EDUCATORS:
=SUMMER WORKSHOPS SCHEDULED=

******INTERESTED EDUCATORS ARE URGED TO CHECK WITH THEIR BOCS REPRESENTATIVES CONCERNING LAST-MINUTE INDIVIDUAL WORKSHOP OPENINGS!*********

"COMPUTER WORKSHOP"

co-sponsored by: University of Northern Colorado, Greeley, Colorado and Northern Colorado Educational Board of Cooperative Services

dates: 7/26 -- 7/30/71
time: 9:00 a.m. -- 5:00 p.m.
location: NCEBOCS offices, 1750 30 Street, Suite 48, Boulder, Colorado

purpose: to acquaint participants with: data processing potential using electronic equipment; develop basic working knowledge of auxiliary computer equipment necessary to operate computers.

"ENVIRONMENTAL STUDIES WORKSHOP"

co-sponsored by: University of Northern Colorado, Greeley, Colorado and Northern Colorado Educational Board of Cooperative Services

dates: 7/19 -- 7/23, 7/26 -- 7/30/71
time: MWF 1:00 -- 4:00 TTH 8:00 -- 4:00
location: University of Northern Colorado, New Library, Room 86, Univ. Park Campus

purpose: to provide an opportunity to teachers at the elementary and secondary levels; to supervisors; and to administrators to become better acquainted with the broad area of environmental studies. Emphasis will be placed on problems, causes, solutions, and accomplishments related to the environment. Special consideration will be given to methods and techniques of implementing environmental study programs into the schools' curricula.

"MULTI-MEDIA WORKSHOP"

co-sponsored by: Eastlake Public Schools, District #12, Adams County, Denver and Northern Colorado Educational Board of Cooperative Services, Boulder

dates: 8/9/ -- 8/13/71
time: all day for the entire week
location: Westview Elementary School, 1300 Roseanna Drive, Northglenn, Colo. 80221

purpose: to familiarize teachers, both elementary and secondary level; supervisors; and administrators with the complex area of multi-media. Emphasis will be placed on one-half day in the production of materials and/or programed instruction in the use of audio-visual equipment. "Hands-on" and production experience will be stressed throughout the workshop.

"EVALUATION WORKSHOP"

sponsored by: Northern Colorado Educational Board of Cooperative Services

dates: 6/21 -- 6/26/71
time: 8:30 a.m. -- 4:30 p.m.
location: Colorado State University, Fort Collins, Colorado

purpose: to orient teachers and administrators in evaluation skills and techniques which will aid them in their classroom activities and/or planning district programs.

Summer Workshops (Continued on page 5)

Summer Workshops (Continued from page 4)

"SYSTEMS WORKSHOP"

co-sponsored by: Center for Field Services and Training, School of Education, CU and Northern Colorado Educational Board of Cooperative Services

dates: 6/14 -- 6/18/71
location: Williams Village, Boulder, Colorado

purpose: to identify individual educator's role in today's trends toward educational planning and management; to join other educators in discussing, identifying, and implementing strategic planning applicable to "real" identified needs.

"INFORMATION RETRIEVAL WORKSHOPS"

Information retrieval workshops will be held on individually scheduled bases throughout the summer. The first workshop emphasis will be an introduction to automated information retrieval to serve new members of a growing network of educators. The second type of workshop will be an inservice, inhouse workshop for participants of the existing network, to involve them in the actual workings of information retrieval and dissemination throughout their educational areas served by this Center.

'SYSTEMS PLANNING': READINGS for EDUCATORS

The following bibliography is offered as another service of the NCEBOCS to area educators. Readings related to "Systems Planning in Education" are selected and printed here for your convenience.

Additional bibliographies highlighting "hot topic" areas of interest to educators may be a continued feature of this newsletter as readers indicate interest and input. Your suggestions for and contributions to those areas are welcomed.

I. Systems Planning in Education.

Curriculum Research Institute, Theories of Instruction, Edited by James B. MacDonald and Robert R. Leeper, Washington: Association for Supervision and Curriculum Development, 1965. LB 1028 .C85

Loughary, John, ed. Man-Machine systems in education. New York: Harper and Row, 19-6. On Order at University of Oregon.

Swarthout, Charlene R. The school library as part of the instructional system. Metuchen, N. J.: Scarecrow Press, 1967. In process at University of Oregon.

"The Systems Approach," (Special Issue) Audiovisual Instruction, May, 1965.

II. Determining Objectives of the Instructional System.

... Basic Studies.

Bruner, Jerome. The Process of education. New York: Vintage Books, 1960. LB 885 .B78

_____. Toward a theory of instruction. Cambridge, Mass.: Belknap-Harvard.

Taxonomy of Education Objectives: The Classification of Education Goals. Benjamin S. Bloom, ed. New York: Longmans Green. 1956-64. 2 Vols. LB 17 .T3

B. Introductory Books for Teachers.

Groisser, Phillip. How to use the fine art of questioning. New York: Teachers Practical Press, 1964. (Distributed by Prentice-Hall)

Mager, Robert F. Preparing instructional objectives. Palo Alto, Calif.: Fearon Publishers, 1962. 371.33 M272

Raths, Louis E. Teaching for thinking: theory and applications. Columbus, Ohio: Charles E. Merrill, 1967. LB 1062 .R3

Sanders, Norris M. Classroom questions: What kind? New York: Harper and Row, 1966. LB 102 S2597 "Systems Planning" Bibliography

(Continued on page 6)

"READINGS"

(Continued from page 5)

Trow, William Clark. The learning process. Washington, D. C.: NEA, 1954. (What Research Says to the Teacher, No. 6) L 11 .W64 No. 6

III. Teaching Study Skills.

A. Research Studies.

Gengler, Charles R. "Developing skills for problem-solving:" a study, School Libraries 15 (May, 1966) p. 31-35.

Gengler, Charles R. A study of selected problem solving skills comparing teacher instructed students with librarian-teacher instructed students. Unpublished D.Ed. dissertation, School of Education, University of Oregon, 1965. Z 718.7 .G4 Theses G287

Henne, Frances. "Instruction in the use of the library and library use of students," pp. 164-190 in Columbia University. School of Library Service. Conference on the Printed and Audio-Visual Materials for Instructional Purposes. 1966. Photocopy available from P. Pond.

_____. "Learning to learn in school libraries, School Libraries 15 (May, 1966) p. 15-23.

Stull, Edith G., A Proposal for the Teaching of Reading in the Elementary School (with) Handbook for Teachers and Librarians Guiding Reference Reading in the Elementary School or Guiding Detection, Discovery, and Development through Reference Reading in the Elementary School, D. Ed., Columbia University, Teachers College, 1962. On order at University of Oregon.

B. Guides for Teachers and Librarians.

Crawford, Marian, Teaching Study Ski..s, Danville, N.Y.: F.A. Owen Publ. Co., 1966. (Instructor Handbook Series).

Hopkinson, Shirley Lois, Instructional Materials for Teaching the Use of the Library: a Selected, Annotated Bibliography of Films, Filmstrips, Books and Pamphlets, Tests, and Other Aids, 2nd ed., San Jose, Calif.: Calemant House, 1967, University of Oregon has 1st ed., 1966, Z666 .H6.

Kranyik, Robert and Shankman, Florence V., How to Teach Study Skills, New York: Teachers Practical Press, 1963. (Prentice-Hall Education Series) Distributed by Prentice-Hall. LB 1049 .K68.

Morse, Horace T., and McCune, George H., Selected Items for Testing Study Skills and Critical Thinking, 4th ed., Washington: National Council for the Social Studies, 1964.

Perspectives in Reading, No. 4. Developing Study Skills in Secondary Schools, Harold L. Heber, ed. Newark, Del.: International Reading Association, 1965, LB 1050 .P4 v.4.

Shankman, Florence V. and Kranyik, Robert, How to Teach Reference and Research Skills, New York: Teachers Practical Press, 1964. (Prentice-Hall Education Series) Distributed by Prentice-Hall. Z 711.2 .S53.

C. Items for Individual Student Use.

Robinson, H. Alan, Taylor, Stanford E., and Frankenpohl, Helen, Study Skills Library, Huntington, N.Y.: Educational Developmental Laboratories, 1965. Available Lane County IED.

Whitney, David C., The First Book of Facts and How to Find Them, New York: Watts, 1966.

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CREDITS

This newsletter is a bi-monthly publication of the Northern Colorado Educational Board of Cooperative Services. For more information about services available to you from this BOCS, contact Executive Director Dr. Walter Turner, or: Director of Program Development, Te Rogers; Director of Program Evaluation, Dr. Douglas Sjogren; Director of Information Retrieval and Multi-Media Program, William McCleary; Director of Data Processing, Gene Mooneyham; or Information Coordinator, Linda McCrea. The NCEBOCS is located at 1750 30 Street, Suite 48, Boulder, Colorado, 80301. Telephone: (303) 444-4987.

PART IV

MONTHLY REPORTS

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for May, 1971

I. Monthly Highlights:

May 5 and 6, 1971

Evaluation - The State Department of Education ESEA Title III Evaluation Team spent 1½ days evaluating the Information Retrieval Center. The onsight evaluation included a general orientation on objectives, procedures and purposes and a project overview. In an attempt to avoid any duplication of effort and overlap with the ESEA Title IV Grant, Dr. Charles Neidt and two graduate students presented preliminary findings from the evaluation being conducted by Colorado State University on the 6 State Information Retrieval Network. On the following day, the Team visited teachers, librarians and administrators in all 7 of the School Districts in the Board of Cooperative Services. (Copies of the findings of this evaluation are available upon request.)

May 11, 1971

Presentation - The Elementary Principals of the Boulder Valley Public Schools received a transparency presentation on the use of ERIC products and services and how to utilize the NEW information products of the Information Retrieval Center. New Product Guides were distributed for all elementary schools in the district.

May 12, 1971

Presentation - The Secondary Principals of the Boulder Valley Public Schools received a transparency presentation on the use of ERIC products and services and how to utilize the NEW information products of the Information Retrieval Center. New Product Guides were distributed for all secondary schools in the district.

May 18, 1971

Meeting - Met with Mrs. Joan Knaub to discuss progress on the ERIC Guide being written by the Information Retrieval Center. Progress to date seems to be advancing nicely with the background information for the guide being collected by Mrs. Knaub.

May 18, 1971

The State of Kansas was officially contacted through letters and phone calls describing the products and services available from the Information Retrieval Center. The State Superintendent of Public Instruction is to contact the Center if they wish a presentation and to become a Wave II State for FY 71-72.

May 26, 1971

Meeting - The BOCS Board of Directors were presented with a report on the growth and future developments on the Information Retrieval Center.

May 27 and 28, 1971

Meeting - The State Title III Project Directors met to discuss projects, exchange information and share ideas. A presentation was made explaining new products and services available from the Information Retrieval Center. The project Directors were encourages to utilize the research and resource services available from the Center.

	Current Month	Total Since July, 1970
II. Microfiche' Distribution:		
A. Microfiche' checked out from the Center on a two week basis	97 Sets	849 Sets
B. Microfiche' duplicated (on a very limited basis)	38 Sets	225 Sets
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	205	1394
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	392	1748
C. Research and Development Specialists	28	102
D. Information Specialists and Dissemination Specialists	66	460
E. State Department Officials	34	492
F. Others (includes college and graduate students, college professors, USOE officials)	64	452
TOTAL FOR MAY	789	4648
IV. *Requests from Regional Information Retrieval Networks:		
Wyoming	39	216
Utah	209	715
Oregon	121	403
Washington	29	571
South Dakota	31	317
Colorado	337	2313
Nevada	1	39
Idaho	4	9
Montana	0	1
Other	18	64
TOTAL FOR MAY	789	4648
V. Total Manual Searches	88	820

* Part IV requests are included in the total

VI. Requests for PET, CAP, CAT AND SID	Current Month	Running Total Since February, 1971
Not reflected in total		
A. Packets of Educational Topics (PET)	180	754
B. Current Awareness Profiles (CAP)	180	408
C. Catalog of Computerized Searches (CAT)	172	788
D. Individualized Searches (Search In-Depth) (SID) (SID Totals Since July, 1970)	257	2698
TOTALS FOR MAY	789	4648

VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program)

(SINCE 3/1/71 ONLY)

*A. Briefs	4	1077
*B. Kits	4	41
*C. Microfiche' Duplicated	4	4

*(PREP is disseminated within the 7 school districts of the BOCS ONLY.)

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 30th Street, Suite 48; Boulder, Colorado 80301

SUBJECT: Monthly Report for April, 1971

I. Monthly Highlights:

April 2, 1971

Meeting - Met with individual responsible for writing "How to Use ERIC" (cookbook) and the development and writing seem to be progressing nicely.

April 7, 1971

Meeting - Met with Mr. Edwin Hildebrand, the Director of Project SPREAD, Colorado Department of Education to discuss possible future methods of cooperation. Long range plans resulting from this meeting included the eventual utilization of terminals for requesting information from the data base of the Retrieval Center.

April 9, 1971

Distribution - Distribution of the NEW PRODUCT GUIDES is progressing nicely with all of the schools in the Board of Cooperative Services receiving multiple copies for use by teachers and building administrators.

April 16, 1971

Meeting - Met with the Colorado School Librarians group at the BOCS Center to explain ERIC products and services and how to utilize the Information Retrieval Center. A tour of the BOCS facilities followed an excellent

question and answer period.

April 19-20, 1971

Meeting - Met with 3 Assistant Superintendents and 5 Department Chairmen of the Montana Department of Education to explain the Automated Information Retrieval services and to see if the state would be interested in becoming involved in the services. A transparency and tape and slide presentation was given in order to explain ERIC and the use of the research and resource information in the data base. The Montana Department of Education will notify the Retrieval Center b y the end of May, if they are interested in becoming a WAVE II State for FY 71-72. (A WAVE II State is not charged for the use of the retrieval services for a one year period).

April 21, 1971

Meeting - Met with the State Superintendent of Public Instruction, Pierre, South Dakota to present a contract for use of the products and services of the Information Retrieval Center. South Dakota accepted the contract and will continue to utilize a terminal connection between South Dakota and the Retrieval Center for FY 71-72.

April 26, 1971

Meeting - Met with new Director of local Catholic Schools in Boulder, Colorado to explore more ways of working more closely with the parochial schools. Utilization of the retrieval services will be forth coming in the immediate future as a result of this meeting.

April 27, 1971

Visitation - Mr. Charles Missar, National Center for Educational Communication, visited the Retrieval Center for the purpose of developing an

understanding of the Retrieval Center program. Mr. Missar met with the staff members in each department to get an explanation of the flow and processing of requests. In the afternoon, Mr. Missar met with the entire Information Retrieval Staff which provided an opportunity for an exchange of ideas and discussion of Information Retrieval. Mr. Missar also gave an excellent explanation of manipulating descriptor terms, writing logic, and the procedures for searching with the Data Dialogue program.

April 28, 1971

Presentation - The entire administrative staff and all librarians of the Poudre R-1 School District; Fort Collins, Colorado received a transparency presentation on the use of ERIC products and services and how to utilize the new products of the Information Retrieval Center.

	Current Month	Running Total Since July, 1970
II. Microfiche' Distribution:		
A. Microfiche' checked out from the Center on a two week basis	140	752
B. Microfiche' duplicated (on a very limited basis)	18	187
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	243	1189
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	312	1356
C. Research and Development Specialists	5	74
D. Information Specialists and Dissemination Specialists	213	394
E. State Department Officials	135	458
F. Others (includes college and graduate students, college professors, USOE officials)	53	388
TOTAL FOR	961	3859
IV. *Requests from Regional Information Retrieval Networks:		
Wyoming	108	177
Utah	99	506
Oregon	95	282
Washington	57	542
South Dakota	31	286
Colorado	564	1976
Nevada	0	38
Idaho	1	5
Montana	0	1
Other	6	46
TOTAL FOR APRIL	961	3859
V. Total Manual Searches	63	732

* Part IV requests are included in the total

VI. Requests for PET, CAP, CAT AND SID Not reflected in total	Current Month	Running Total Since Febuary, 1971
A. Packets of Educational Topics (PET)	275	574
B. Current Awareness Profiles (CAP)	116	228
C. Catalog of Computerized Searches (CAT)	333	616
D. Individualized Searches (Search In-Depth) (SID)	237	2441
TOTALS FOR APRIL	961	3859

VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program)

(SINCE 3/1/71 ONLY)

*A. Briefs	41	1073
*B. Kits	10	37

*(PREP is disseminated within the 7 school districts of the BOCS ONLY.)

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Avenue, S.W. Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48; Boulder, Colorado 80301

SUBJECT: Monthly Report for March, 1971

I. Monthly Highlights:

March 5, 1971

Meeting - Met with Colorado ESEA Title III Directors to explain the new information retrieval products and services.

March 9, 1971

Presentation - Dr. Jack Cousins, University of Colorado Graduate Class, discussed the use of information retrieval and ERIC products and services. (Linda)

March 15, 1971

Meeting - Met with Dr. Charles Neidt, Colorado State University to discuss preliminary results of questioneer for the evaluation of the Information Retrieval Center. The feedback regarding the use of ERIC and information retrieval is very positive. Several changes in procedure and the stystem for processing have resulted from the evaluation findings.

March 17, 1971

Meeting - Met with officials from the Wyoming Department of Education to explain the new products and services and to discuss funding for utilization of the Center for FY-71-72. The same contract was offered Wyoming with two basic alternatives as offered the other States. A verbal agreement was given by the State Department Officials

for fiscal support for FY-71-72. However, Wyoming will have until May 30, 1971 to sign he contract.

March 22, 1971

Trip - The Arizona State Department of Education was visited to see whether the State would be interested in receiving the information retrieval services. A presentation was made; however, the Department of Education was unsure whether they would be able to implement a network for handling information within the State. The Information Retrieval Center will be notified if the State Department decides to become a WAVE II user for FY-71-72.

March 23, 1971

Visitation - Mr. Harvey Marron and Mr. Chuck Hoover, U.S. Office of Education and ERIC Officials visited the Information Retrieval Center to discuss long range plans, the future of the information retrieval program and the FY-1971-72 proposal due April 15, 1971.

March 26, 1971

Meeting - Met with Mr. James Meeks, Assistant Superintendent Office of Library Services for the State of Colorado to discuss Colorado's roll in the 6 State information retrieval network. A proposal was submitted to Mr. Meeks to request additional funding for support of the information retrieval program from the home State. The proposal is to be submitted to the State Board of Education soon.

March 31, 1971

Presentation - Elementary School Staff (45 people) Denver - Disucssed ERIC products and services and how to utilize the Information Retrieval Center's services. (Linda)

		Current Month	Total Since July, 1
II.	Microfiche' Distribution:		
	A. Microfiche' checked out from the Center on a two week basis	83 sets	592 sets
	B. Microfiche' duplicated (on a very limited basis)	6 sets	169 sets
III.	Requests for Automated Information Retrieval based on the ERIC Data Base:		
	A. Educational practitioners (includes teachers and librarians K-12)	228	946
	B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	238	1.044
	C. Research and Development Specialists	14	69
	D. Information Specialists and Dissemination Specialists	68	181
	E. State Department Officials	94	323
	F. Others (includes college and graduate students, college professors, USOE officials)	35	335
	TOTAL FOR March	677	2,898
IV.	*Requests from Regional Information Retrieval Networks:		
	Wyoming	17	69
	Utah	75	407
	Oregon	53	187
	Washington	48	485
	South Dakota	58	255
	Colorado	417	1,412
	Nevada	1	38
	Other	3	40
	IDaho	4	4
	Montana	1	1
	TOTAL FOR MARCH	677	2,898
V.	Total Manual Searches	~~83~~	

* Part IV requests are included in the total

VI. Requests for PET, CAP, CAT and SID. (ot reflected in total.	Current Month	Running Total Since Feb. 1971
A. Packets of Educational Topics (PET)	187	299
B. Current Awareness Profiles (CAP)	106	112
C. Catalog of Computerized Searches (CAT)	153	283
D. Individualized Searches (Search In-Depth) (SID)	231	2,204
TOTALS FOR MARCH	677	2,898
VII. PREP Briefs (Putting Research into Educational Practice) (U.S. Office - Dissemination of Research)	147 (Since 4/1/71)	

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for February, 1971

I. Monthly Highlights:

February 1-5, 1971

Meeting - Met with officials from the State Departments of Education in Oregon, Washington and Idaho to discuss funding for 1971-72. A contract with two alternative plans was presented including: (1) to continue information retrieval services as are currently being conducted with each state and, (2) to place teleprocessing terminals in the State Departments of Education as is currently being done in South Dakota. Idaho will receive the services at no cost for one year under the 1971-72 grant from the Research & Training Authority (Title IV). All were in full agreement with Oregon and Washington requesting alternative (1) for 1971-72, and contributing some funding to continue the service.

February 8, 1971

Meeting - Dr. Ray Anderton, University of Colorado, has a grant from the University to produce a 16mm film dealing with educational administration. He contacted the Board of Cooperative Services about filming the operation and specifically the Information Retrieval Center to explain the services of ERIC and the Center. A rough draft of the script will be available soon.

February 10, 1971

Meeting - Met with Mr. John Shook, from Washington, D.C., to discuss the facilitation of handling Federal grants to State and local agencies.

February 17, 1971

Meeting - Met with Mrs. Violet Wagener, Assistant Director, ERIC Clearinghouse for Social Studies, to explain new products and services. Discussed areas for cooperation including utilization of the BOCS computer in the future. (No conclusions reached.)

February 18, 1971

Presentation - Junior High School staff (50 people), Denver, to discuss the use of Information Retrieval and ERIC products and services.

February 18, 1971

Meeting - Met with officials from Utah Department of Education to discuss funding for utilization of Information Retrieval Services for 1971-72. The same contract was offered and Utah agreed to alternative (1) (See February 1-5) and is willing to contribute some funding for 1971-72.

February 25, 1971

Meeting - Met with Dr. Neidt, Director of Human Factor Research Laboratory at Colorado State University to discuss the preliminary findings of the evaluation of the Information Retrieval Center. The findings of the research team (to date) regarding the 6 State Information Retrieval Network are most positive and interesting. Results of the evaluation showing excellent utilization of ERIC products and services from the Information Retrieval Center will soon be available from the evaluation.

		Current Month	Total Since July, 19
II.	Microfiche' Distribution:		
	A. Microfiche' checked out from the Center on a two week basis	93 sets	509 se
	B. Microfiche' duplicated (on a very limited basis)	18 sets	163 se
III.	Requests for Automated Information Retrieval based on the ERIC Data Base:		
	A. Educational practitioners (includes teachers and librarians K-12)	185	718
	B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	177	806
	C. Research and Development Specialists	8	55
	D. Information Specialists and Dissemination Specialists	21	113
	E. State Department Officials	50	229
	F. Others (includes college and graduate students, college professors, USOE officials)	80	300
	TOTAL FOR February	521	2221
IV.	*Requests from Regional Information Retrieval Networks:		
	Wyoming	17	52
	Utah	92	332
	Oregon	49	134
	Washington	72	437
	South Dakota	70	197
	Colorado	215	995
	Nevada	2	37
	Other	4	37
	TOTAL FOR February	521	2221
V.	Total Manual Searches	71	593

* Part IV requests are included in the total

VI. Individual Product Totals:	Current Month	Total Since Jan. 1971
A. Packets of Educational Topics (PET)	105	112
B. Current Awareness Profiles (CAP)	6	6
C. Catalog of Computerized Searches (CAT)	102	130
D. Individualized Searches (SEARCH IN-DEPTH)(SID)	273	1973
TOTAL SEARCHES	486	2221

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for January, 1971

I. Monthly Highlights:

January 6, 1971

Presentation - Made two tape and slide presentations to Fairview High School staff, Boulder, Colorado. Discussed the use of the Information Retrieval Services and ERIC products and services through tape and slide presentation.

January 7, 1971

Meeting - Met with Mr. James Meeks, Director of Libraries, Colorado Department of Education. Discussed the future funding of the Information Retrieval Center for the State of Colorado.

January 12, 1971

Presentation - Graduate class, Research and Statistics, Denver University. Discussed the use of Information Retrieval Services, BOCS Information Retrieval Center and ERIC products and services.

January 15, 1971

Meeting - Met with librarians from Northern Colorado University, Greeley, Colorado to discuss the target date for installation of the DCT-2000 terminal hopefully by March 1, 1971.

January 20, 1971

Meeting - Met with representative from Bell Telephone to discuss possibilities for the Center's utilization of FTS (Federal Telephone Service) network for transmission of data to South Dakota. No conclusion has been reached at this time.

January 21-22, 1971

Meeting - Met with two representatives of the Far West Regional Lab from Berkeley, California to discuss utilizing Information Retrieval Services and also to explore possibilities for implementation of their products throughout the BOCS's districts.

January 25, 1971

Meeting - Met with representative from the University of Colorado to discuss making a 15 minute, color, 16mm motion picture of the Information Retrieval Center and the services offered by the BOCS.

January 28, 1971

Meeting - Met with representatives from Northern Colorado University, Greeley, Colorado, to further discuss implementation of the terminal for transmission of ERIC data and development of undergraduate programs for utilization of ERIC resource and research data on campus.

January 18-29, 1971

Low number of requests processed during January due to the Information Retrieval Center being closed (no processing of information) for purposes of development and implementation of three additional products including, PET - Packets of Educational Topics; CAT - Catalog of Computerized Searches and CAP - Current Awareness Profiles.

	Current Month	Running Total Since July, 197
II. Microfiche' Distribution:		
A. Microfiche' checked out from the Center on a two week basis	21 sets	416
B. Microfiche' duplicated (on a very limited basis)	2 sets	145
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	69	533
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	51	629
C. Research and Development Specialists	1	47
D. Information Specialists and Dissemination Specialists	5	92
E. State Department Officials	11	179
F. Others (includes college and graduate students, college professors, USOE officials)	30	220
TOTAL FOR January, 1971	167	1700
IV. *Requests from Regional Information Retrieval Networks:		
Wyoming	3	35
Utah	19	240
Oregon	20	85
Washington	8	365
South Dakota	25	127
Colorado	90	780
Nevada	-0-	35
Other	2	33
TOTAL FOR January, 1971	167	1700
V. Total Manual Searches	33	522

* Part IV requests are included in the total

VI. Requests for PET, CAP, CAT and SID.	Current Month	Running Total Since Feb. 1971
Not reflected in total.		
A. Packets of Educational Topics (PET)	7	7
B. Current Awareness Profiles (CAP)	-0-	-0-
C. Catalog of Computerized Searches (CAT)	28	28
D. Individualized Searches (Search In-Depth) (SID)	167	-0-

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center NCEBOCS 1750 30th Street, Suite 48; Boulder, Colorado 80301

SUBJECT: Monthly Report for December, 1970

I. Monthly Highlights:

December 12, 1970

Presentation - Made a tape and slide presentation to Burke Elementary School. Discussed the use of the Information Retrieval Services and ERIC products and services.

December 7 and 8, 1970

Visitor - Dr. Lee Burchinal, Assistant Commissioner, U.S. Office of Education visited the Information Retrieval Center to discuss the services and programs of the Center.

December 14, 1970

Presentation - Made a transparency presentation to the Secondary Librarians of the Northglenn Public Schools. Discussed the operation of BOCS Information Retrieval Center, ERIC products and services and toured the Center.

December 21, 1970

Meeting - Met with representatives of Western Union to discuss transmission of data from the Information Retrieval Center to the Madison, South Dakota terminal. We are presently having trouble transmitting profiles of information because of Bell Telephone's poor lines to South Dakota. Some data is garbled because of interference on the telephone lines. Also, we have sent

data through as many as 43 switching stations before making contact in South Dakota. Therefore, I have asked Western Union for a proposal including 1) cost of transmitting over Western Union lines and 2) possibility of using Government Tele-Pac (GSA) lines to South Dakota. I am currently (anxiously) awaiting their reply.

"Bell Telephone Company maintains if we transmit data to the other states in the Regional Information Retrieval Operation, the transmission would be handled by Micro Wave relay and transmission problems should not occur."

		Current Month	Running Total Since July, 197
II.	Microfiche' Distribution:		
	A. Microfiche' checked out from the Center on a two week basis	109 sets	395
	B. Microfiche' duplicated (on a very limited basis)	30 sets	143
III.	Requests for Automated Information Retrieval based on the ERIC Data Base:		
	A. Educational practitioners (includes teachers and librarians K-12)	92	464
	B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	108	628
	C. Research and Development Specialists	4	46
	D. Information Specialists and Dissemination Specialists	19	87
	E. State Department Officials	20	168
	F. Others (includes college and graduate students, college professors, USOE officials)	31	190
	TOTAL FOR	274	1533
IV.	*Requests from Regional Information Retrieval Networks:		
	Wyoming	4	32
	Utah	43	221
	Oregon	24	65
	Washington	59	357
	South Dakota	47	92
	Colorado	90	690
	Nevada	1	35
	Other	6	31
	TOTAL FOR December	274	1533
V.	Total Manual Searches	102	489

* Part IV requests are included in the total

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education - 400 Maryland Ave., S.W., Washington, D.C. 20202

Mr. Charles Hoover, Acting Director - Division of Information Resources, U.S. Office of Education - 330 Independence Ave., S.W. Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center NCEBOCS - 1750 30th St., Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for November, 1970

I. Monthly Highlights:

November 4, 1970

Presentation - Met with the new teachers responsible for Secondary Language Arts in the Boulder Public Schools. Discussed BOCS, Information Retrieval, ERIC, and then toured the Center.

November 5-6, 1970

Meeting - Hosted the ERIC Products and Services Evaluation Team (Dean Bernard Fry, Principal Investigator) which met in Boulder. Presented information on the Retrieval Center activities, uses of ERIC products and services; conducted a tour of the Center.

November 9, 1970

Visitor - Mr. Charles Hoover, Acting Director of ERIC/CHESS, visited the Information Retrieval Center for one half day and the ERIC/CHESS for one half day.

November 10, 1970

Presentation (A.M.) - Made a transparency presentation to a workshop sponsored by the University of Denver for Western States Small School Project personnel. State Directors and members of Colorado Department of Education were in attendance. Discussed BOCS, Information Retrieval and ERIC.

November 10, 1970

Presentation (P.M.) - Made a tape and slide presentation to the Elementary Librarians of the Boulder Valley Public Schools. Discussed the use of Information Retrieval and ERIC. Also included introduction and tour of the BOCS.

November 12, 1970

Presentation - Staff members of Cherry Creek Public Schools, Englewood, Colorado visited the BOCS. Presented information on the use of our services and ERIC through a transparency presentation.

November 16, 1970

Meeting - Met with the administrative staff of the Boulder Valley Public Schools. Discussed writing evaluations for Federal Projects (ESEA Title II and III programs) and use of ERIC Data Base and Information Retrieval.

November 17, 1970

Terminal Communication (on DCT 2000) operational between BOCS Information Retrieval Center and South Dakota.

November 18, 1970

Meeting - Met with the Director and Assistant Director of ERIC Clearinghouse on Social Science Education - Boulder, Colorado. Discussed utilization of Information Retrieval services and turn-around-time necessary to provide information for the Clearinghouse staff.

November 18, 1970

Presentation - Tape and slide program for new Elementary Reading Teachers of Boulder Valley Public Schools. Discussed utilization of Information Retrieval services, ERIC, and toured the Center.

November 19, 1970

Presentation - Met with staff during the regular faculty meeting of Aurora 7 Elementary School, Boulder, Colorado. Introduced the BOCS concept and use of Information Retrieval and ERIC.

November 20, 1970

Presentation - Made a presentation to Wyoming State Department of Education; Cheyenne, on the use of ERIC and Information Retrieval services as related to the 6 state retrieval network.

November 25, 1970

Presentation - Tape and slide program for the Secondary Librarians of the Boulder Valley Public Schools. Discussed the utilization of Information Retrieval, ERIC and the concept of BOCS. Also toured facilities and explained the use and suggestions for types of Microfiche' readers.

November 28, 1970 to December 2, 1970

Conference - ERIC Query User's Conference; Raleigh, North Carolina. Presentation on Information Retrieval to conference participants. Most interesting conference providing opportunity to compare Query as a retrieval software package with our own inhouse software package. Met a number of Center and Project Directors permitting the opportunity to share ideas, materials and "information".

	Current Month	Running Total Since July,197
II. Microfiche' Distribution:		
A. Microfiche' checked out from the Center on a two week basis	94 sets	286
B. Microfiche' duplicated (on a very limited basis)	31 sets	113
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	102	372
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	148	520
C. Research and Development Specialists	10	42
D. Information Specialists and Dissemination Specialists	18	68
E. State Department Officials	53	148
F. Others (includes college and graduate students, college professors, USOE officials)	57	159
TOTAL FOR NOVEMBER	388	1259
IV. *Requests from Regional Information Retrieval Networks:		
Wyoming	21	28
Utah	30	178
Oregon	18	41
Washington	124	298
South Dakota	19	45
Colorado	161	600
Nevada	6	34
Other	9	25
TOTAL FOR NOVEMBER	388	1259
V. Total Manual Searches	84	387

* Part IV requests are included in the total

TO: Mr. Charles Hoover, Acting Director - Division of Information Resources

FROM: William H. McCleary, Director - Information Retrieval Center NCE...CCS

SUBJECT: MONTHLY REPORT FOR **October, 1970**

I. Monthly Highlights:

October 2, 1970

Meeting - Longmont-St. Vrain Valley Public Schools, Central District Administrative Staff to discuss microfiche' readers and the concept of utilizing fiche' for stored Educational research information.

October 7, 1970

Presentation - Loveland-the Big Thompson District. A transparency presentation to the entire administrative staff - automated information retrieval and how to utilize the services of the Northern Colorado Educational Board of Cooperative Services.

October 8, 1970

Presentation - Fort Collins-Colorado State University. Dr. Sjogren's class on methods of research - discussing Automated Information Retrieval and the ERIC concept of resource collection and dissemination.

October 19, 1970

Visitation - The Director and Assistant Director of the Colorado Education Association Research Department visited the Northern Colorado Educational BOCS to discuss the utilization of the Information Retrieval Services. A plan for sharing research and resource information was agreed upon.

October 21, 1970

Meeting - A meeting to discuss the concept of associate membership with the BOCS was held with representatives of Colorado State University, University of Northern Colorado and Colorado University present. It was determined that while an associate member is a non-voting member, many mutual benefits will be gained but a close cooperation between the Northern Colorado Educational BOCS and the three universities; for example, the University of Northern Colorado is presently exploring the possibility of the Information Retrieval Center placing a DCT-2000 terminal on campus.

October 22, 1970

Meeting - The graduate students assisting with the evaluation of the Information Retrieval Center as contracted through Colorado State University, discussed (for 4½ hours) the history, objectives and evaluative techniques of the Retrieval Center's program.

October 23, 1970

Meeting - Representatives from Denver Community College toured the Northern Colorado Educational BOCS facilities and discussed the possibility of using the Information Retrieval services. No conclusions have been reached at this time.

October 23, 1970

Meeting - Northglenn - To discuss the programing and data collection for the personnel package for their district. A final approval of data collection forms was granted by the District Administration.

October 26th to October 29, 1970 - Trip

October 27, 1970

Presentation - Western Nevada Regional Education Center, Nevada Department of Education and University of Nevada officials heard a presentation on the Information Retrieval services of the BOCS. Following a question and answer period a contract was offered to the state on a cost-per-profile basis or for a terminal connection to the Center. The contract was rejected for the present because Nevada receives printouts of ERIC abstracts from the DATA DIALOGUE System in California on a no cost basis. However, we will continue to serve the Western Nevada Regional Education Center on a cost-per-profile basis.

October 28, 1970

Visited the San Mateo County, California Information Retrieval Center operated by Mr. Frank Mattis. I enjoyed this very excellent center and appreciated the opportunity to share ideas and exchange information with Mr. Mattis.

October 29, 1970

Visited the Stanford ERIC Clearinghouse and the Lockheed Corporation DATA DIALOGUE System. Had opportunity to manipulate the CRT, build logic and receive a printout - most interesting retrieval service.

October 30, 1970

Meeting - Met with UNIVAC officials to discuss an operators handbook for the DCT-2000 terminal to be shipped to South Dakota. UNIVAC is presently experiencing some software problems with the automatic dial-up and unattended answering sorts of the program. We anticipate shipping the DCT-2000 by November 15, 1970.

		Current Month	Running Total Since July, 197
II.	Microfiche' Distribution:		
	A. Microfiche' checked out from the Center on a two week basis	80 Sets	192 Set
	B. Microfiche' duplicated (on a very limited basis)	7 Sets	82 Set
III.	Requests for Automated Information Retrieval based on the ERIC Data Base:		
	A. Educational practitioners (includes teachers and librarians K-12)	139	270
	B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	140	322
	C. Research and Development Specialists	8	32
	D. Information Specialists and Dissemination Specialists	21	50
	E. State Department Officials	19	95
	F. Others (includes college and graduate students, college professors, USOE officials)	45	102
	TOTAL FOR October, 1970	372	871
IV.	*Requests from Regional Information Retrieval Networks:		
	Wyoming	2	7
	Utah	58	148
	Oregon	12	23
	Washington	85	174
	South Dakota	24	36
	Colorado	176	439
	Nevada	10	28
	Other	5	16
	TOTAL FOR October, 1970	372	871
V.	Total Manual Searches	113	303

* Part IV requests are included in the total

TO: Mr. Charles Hoover, Acting Director - Division of Information Resources

FROM: William H. McCleary, Director - Information Retrieval Center NCEBOCS

SUBJECT: MONTHLY REPORT FOR September, 1970

I. Monthly Highlights:

1. 9/3/70 - Mr. Ted Rogers, Dr. Sjogren and I made a presentation to the consultants of the Boulder Valley Public Schools.

2. 9/4/70 - I met with Mrs. Vi Wagener of the ERIC Clearinghouse for Social Services to discuss working relationships and the Clearinghouses' utilization of our services.

3. 9/8/70 - Dr. Turner and I visited Northern Colorado University to discuss a contractual agreement with Dr. Broderius and our Center. The agreement would include placing a DCT 2000 250 line/minute terminal printer on sight in Greeley for utilization by the college students. Dr. Broderius planned to discuss the contract further with his staff.

4. 9/9/70 - Visited with Dr. Rose, University of Colorado,about the role of a University as an associate member of a Board of Cooperative Services. A meeting will be held in October to discuss plans (in detail) with each of the three Associate Member Universities.

5. 9/10/70 - Made a presentation to the administrative staff and librarians of Eastlake District #12, Northglenn, Colorado. The presentation was based on:

1. An overview of the BOCS
2. How to utilize the services of the Information Retrieval Center.

6. 9/16/70 - Attended a meeting in Denver called by the Special Education Division of the Colorado Department of Education regarding the feasibility of a Statewide Instructional Materials Center. Ideas were exchanged and explored by the 25 individuals involved; however, no conclusions were reached at that time.

7. 9/16/70 - Attended a meeting at Northglenn to discuss the personnel software package the Center is developing for the District. Mr. Gil Foresline and Mr. Norman Smith were present. Discussion centered on the actual structure and development of the data collecting forms.

8. 9/17/70 - Met with Dr. Charles Neidt, Academic Vice President, CSU, to discuss the evaluation of the BOCS operation and the Automated Information Retrieval Program as it expands to a 6 State Regional Operation.

9. 9/18/70 - Met with Mrs. Vi Wagener to discuss ERIC/BOCS relationship and services.

MONTHLY HIGHLIGHTS CONTINUED -

10. 9/18/70 - Dr. Turner, Dr. Sjogren, Mr. Rogers and I met with CDE Commissioner, Dr. B. Hansford, to discuss the scope of services offered by the Northern Colorado BOCS. A very interesting meeting with open exchange from all present.

11. 9/21/70 - 9/22/70 - Two visitors from Phi Delta Kappa International, University of Indiana; Bloomington, Indiana visited the Center to discuss automated information retrieval. PDK plans on getting their own computer for the retrieval of educational data and Mr. Robertson and Mr. McDaniel were most interested in the Center operation.

12. 9/23/70 - Dr. Sjogren, Mr. Rogers and I made a formal presentation to the administrative staff (including building principals) of the Westminister Public Schools. The scope of the services offered by the 3 component parts of the Center were explained in detail.

13. 9/23/70 - Mr. Wally Franz and a colleague from a Title III Project in Tucson, Arizona visited the Center to discuss the services of the BOCS.

14. 9/24/70 - Heard a presentation by Mr. Rogers discussing the systems approach to long range planning models. Very interesting and informative and helped the staff to understand what other component services are being offered by the BOCS.

15. 9/24/70 - Met with Dr. Neidt to discuss data collection for the evaluation of the BOCS.

16. 9/25/70 - Traveled to Denver to meet with Mr. Robert Little, CDE, and all Directors of Educational Data Processors in the Metro area. The purposes of the meeting was to encourage the sharing of ideas and to gain a measure of consistance throughout the State where District/EDP installations are located.

17. 9/28/70 - Mrs. Harriett Church, Home Economics Consultant for Boulder Valley Public Schools, and 20 Home Economics teachers visited the Center to learn about utilizing the services of the Center.

DATA PROCESSING APPLICATIONS

Handled over 300 requests for information during September.

Received a DCT 2000 250 line/minute terminal printer from UNIVAC. The terminal will be sent to South Dakota by mid-October.

Received a DCS-4 (data communication sub-system) to handle the transmission synchronization between the Center and South Dakota.

Working on the Northglenn personnel package. Software program being written. The new data is collected and the tape containing information is being created.

Working on the program to search on the CIJE tapes.

Completing the program for the reference librarians to keep track of items checked out from the Center collection.

II. Microfiche' Distribution:

A. Microfiche' checked out from the Center on a two week basis	32 sets
B. Microfiche' duplicated (on a very limited basis)	30

III. Requests for Automated Information Retrieval based on the ERIC Data Base:

A. Educational practioners (includes teachers and librarians K-12)	100
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	131
C. Research and Development Specialist	14
D. Information Specialists and Dissemination Specialists	12
E. State Department Officials	38
F. Others (includes college and graduate students, college professors, USOE officials)	27
TOTAL FOR SEPTEMBER	322

IV. *Requests from Regional Information Retrieval Networks:

Wyoming	0
Utah	72
Oregon	10
Washington	53
South Dakota	4
Colorado	171
Nevada	7
OTHER	5

V. Total Manual Searches 66

* Part IV requests are included in the total

TO: Mr. Charles Hoover, Acting Director - Division of Information Resources

FROM: William H. McCleary, Director - Information Retrieval Center NCEBOCS

SUBJECT: MONTHLY REPORT FOR August

I. Monthly Highlights:

A. The month of August was one of planning and meeting with the administrative staffs of the member districts of the BOCS. Each district identified a major problem area that the BOCS staff will evaluate, provide research data and develop new programs during the school year.

B. A proposal for a bilingual program is being written and will be submitted to the USOE by late September.

C. Meetings have been held with the Deans of the Schools of Education at Colorado State University, University of Colorado and University of Northern Colorado. Each of these institutions has submitted a proposal to be an associate member of the BOCS.

D. Plans also include a DCT 2000 online printer from our computer to the University of Northern Colorado Library. The online application will be financially supported by the university with an agreement to print a minimum of 1,000 profiles a month.

E. The state of Nevada is in the process of exploring the possibility of becoming a member of the regional information retrieval program.

II. Microfiche' Distribution:

A. Microfiche' checked out from the Center on a two week basis	40 sets
B. Microfiche' duplicated (on a very limited basis)	45 Fiche'

III. Requests for Automated Information Retrieval based on the ERIC Data Base:

A. Educational practioners (includes teachers and librarians K-12)	9
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	25
C. Research and Development Specialist	2
D. Information Specialists and Dissemination Specialists	5
E. State Department Officials	31
F. Others (includes college and graduate students, college professors, USOE officials)	26
TOTAL FOR August	98

IV. *Requests from Regional Information Retrieval Networks:

Wyoming	5
Utah	16
Oregon	0
Washington	34
South Dakota	3
Colorado	59
Nevada	11

V. Total Manual Searches 69

* Part IV requests are included in the total